Comparison of MetAP2 Homologues (mouse = SEQ ID NO:13; rat = SEQ ID NO:17; human = SEQ ID NO:12; yeast = SEQ ID NO:14)

```
      1               15 16               30 31               45 46               60 61               75 76               90
mouse MAGVEQAASFGGHLN GDLDPDDREEGTSST AEEAAKKKRRKKKKG KGAVSAVQQELDKES GALVDEVAKQLESQA LEEKERDDDDEDGDG      90
rat   MAGVEEASSFGGHLN RDLDPDDREEGTSST AEEAAKKKRRKKKKG KGAVSAGQQELDKES GTSVDEVAKQLERQA LEEKEKDDDDEDGDG      90
human MAGVEEVAASGSHLN GDLDPDDREEGAAST AEEAAKKKRRKKKKS KGPSAAGEQEPDKES GASVDEVARQLERSA LEDKERDEDDEDGDG      90
yeast ---------------- ---------------- ---------------- -------MTDAEIEN SPASDLKELNLENEG VEQQDQAKADESDPV      38

      91              105 106             120 121             135 136             150 151             165 166             180
mouse DADGATGKKKKKKKK KRGPKVQTDPPSVPI CDLYPNGVFPKGQEC EYPPTQDGRTAAWRT TSEEKKALDQASEEI WNDFREAAEAHRQVR      180
rat   DGDGAAGKKKKKKKK KRGPRVQTDPPSVPI CDLYPNGVFPKGQEC EYPPTQDGRTAAWRT TSEEKKALDQASEEI WNDFREAAEAHRQVR      180
human DGDGATGKKKKKKKK KRGPKVQTDPPSVPI CDLYPNGVFPKGQEC EYPPTQDGRTAAWRT TSEEKKALDQASEEI WNDFREAAEAHRQVR      180
yeast ESKKKKNKKKKKKKS N----------VKKI ELLFPDGKYPEGAWM DYHQDFNLQRTTDEE SRYLKRDLERA--EH WNDVRKGAEIHRRVR      116

      181             195 196             210 211             225 226             240 241             255 256             270
mouse KYVMSWIKPGMTMIE ICEKLEDCSRKLIKE NGLNAG-------LA FPTGCSLNNCAAHYT PNAGDTTVLQYDDIC KIDFGTHISGRIIDC      263
rat   KYVMSWIKPGMTMIE ICEKLEDCSRKLIKE NGLNAG-------LA FPTGCSLNNCAAHYT PNAGDTTVLQYDDIC KIDFGTHISGRIIDC      263
human KYVMSWIKPGMTMIE ICEKLEDCSRKLIKE NGLNAG-------LA FPTGCSLNNCAAHYT PNAGDTTVLQYDDIC KIDFGTHISGRIIDC      263
yeast RAIKDRIVPGMKLMD IADMIENTTRKYTGA ENLLAMEDPKSQGIG FPTGLSLNHCAAHFT PNAGDKTVLKYEDVM KVDYGVQVNGNIIDS      206

      271             285 286             300 301             315 316             330 331             345 346             360
mouse AFTVTFNPKYDILLT AVKDATNTGIKCAGI DVRLCDVGEAIQEVM ESYEVEIDGKTYQVK PIRNLNGHSIGPYRI HAGKTVPIVKGGEAT      353
rat   AFTVTFNPKYDILLK AVKDATNTGIKCAGI DVRLCDVGEAIQEVM ESYEVEIDGKTYQVK PIRNLNGHSIGPYRI HAGKTVPIVKGGEAT      353
human AFTVTFNPKYDTLLK AVKDATNTGIKCAGI DVRLCDVGEAIQEVM ESYEVEIDGKTYQVK PIRNLNGHSIGPYRI HAGKTVPIVKGGEAT      353
yeast AFTVSFDPQYDNLLA AVKDATYTGIKEAGI DVRLTDIGEAIQEVM ESYEVEINGETYQVK PCRNLCGHSIAPYRI HGGKSVPIVKNGDTT      296

      361             375 376             390 391             405 406             420 421             435 436             450
mouse RMEEGEVYAIETFGS TGKGVVHDDMECSHY MKNFDVGHVPIRLPR TKHLLNVINENFGTL AFCRRWLDRLGESKY LMALKNLCDLGIVDP      443
rat   RMEEGEVYAIETFGS TGKGVVHDDMECSHY MKNFDVGHVPIRLPR TKHLLNVINENFGTL AFCRRWLDRLGESKY LMALKNLCDLGIVDP      443
human RMEEGEVYAIETFGS TGKGVVHDDMECSHY MKNFDVGHVPIRLPR TKHLLNVINENFGTL AFCRRWLDRLGESKY LMALKNLCDLGIVDP      443
yeast KMEEGEHFAIETFGS TGRGYVTAGGEVSHY ARSAEDHQVMPTLDS AKNLLKTIDRNFGTL PFCRRYLDRLGQEKY LFALNNLVRHGLVQD      386

      451             465 466             480
mouse YPPLCDIKGSYTAQF EHTILLRPTCKEVVS RGDDY--    478
rat   YPPLCDIKGSYTAQF EHTILCAQPVKKLSA EEMTIKT    480
human YPPLCDIKGSYTAQF EHTILLRPTCKEVVS RGDDY--    478
yeast YPPLNDIPGSYTAQF EHTILLHAHKKEVVS KGDDY--    421
```

Figure 1

Title: Dominant Negative Variants of Methionine Aminopeptidase 2 and Clinical Uses Therefor
Inventor(s): Chang et al.
Appln. No. 10/712,359
Docket # 66153/45004
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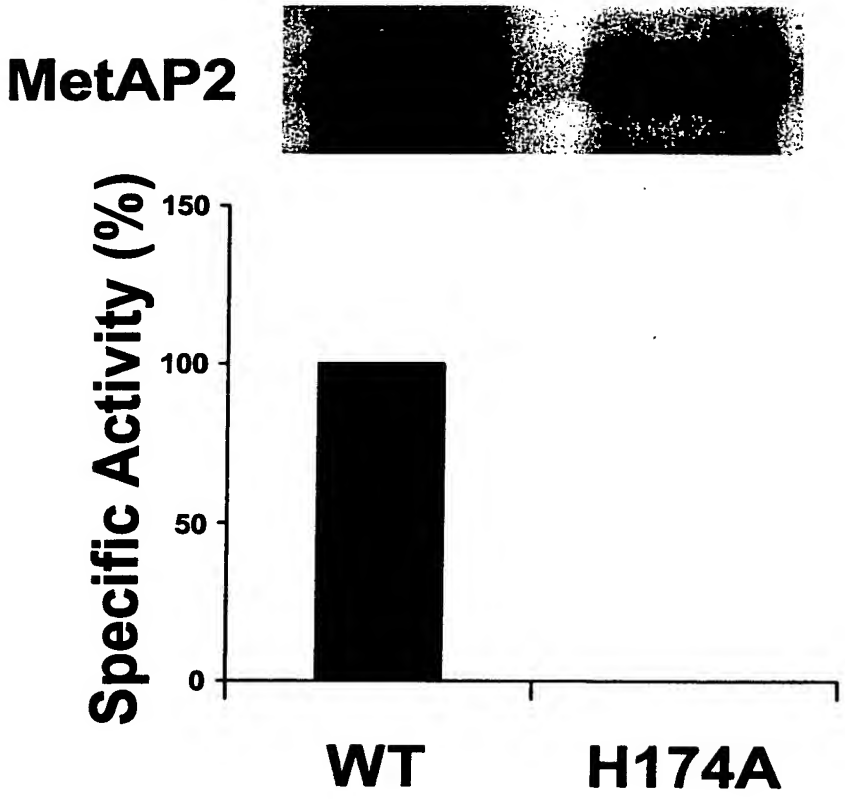
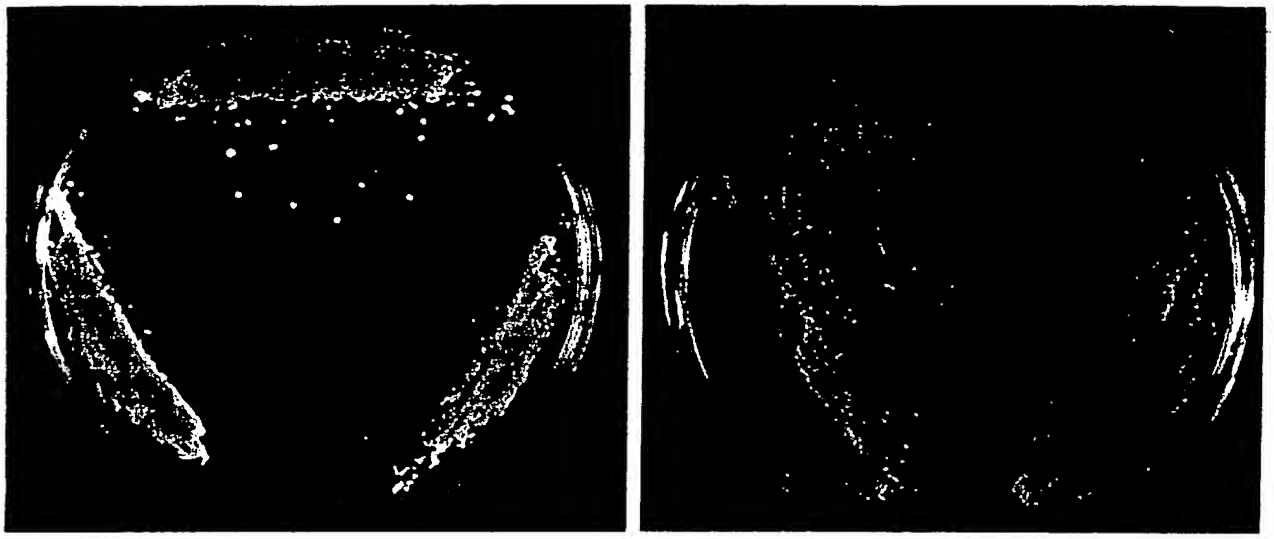


Figure 2



A. Glucose **B. Galactose**

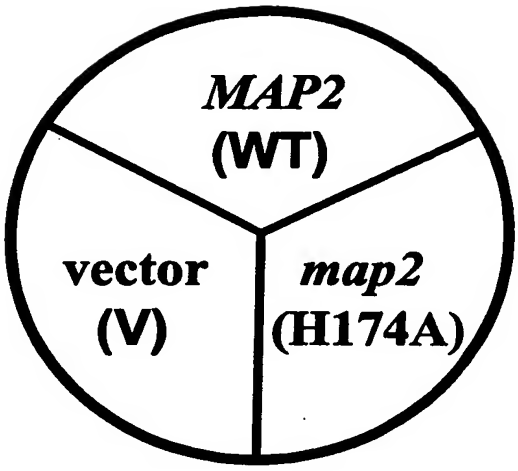


Figure 3

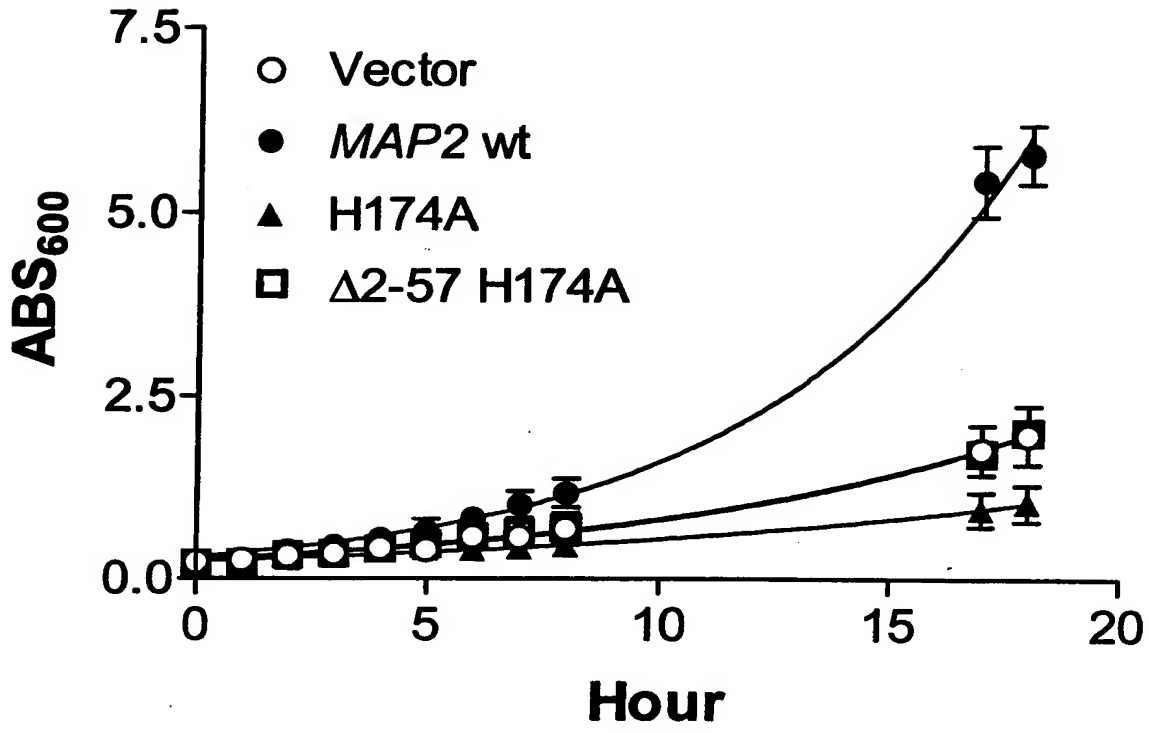
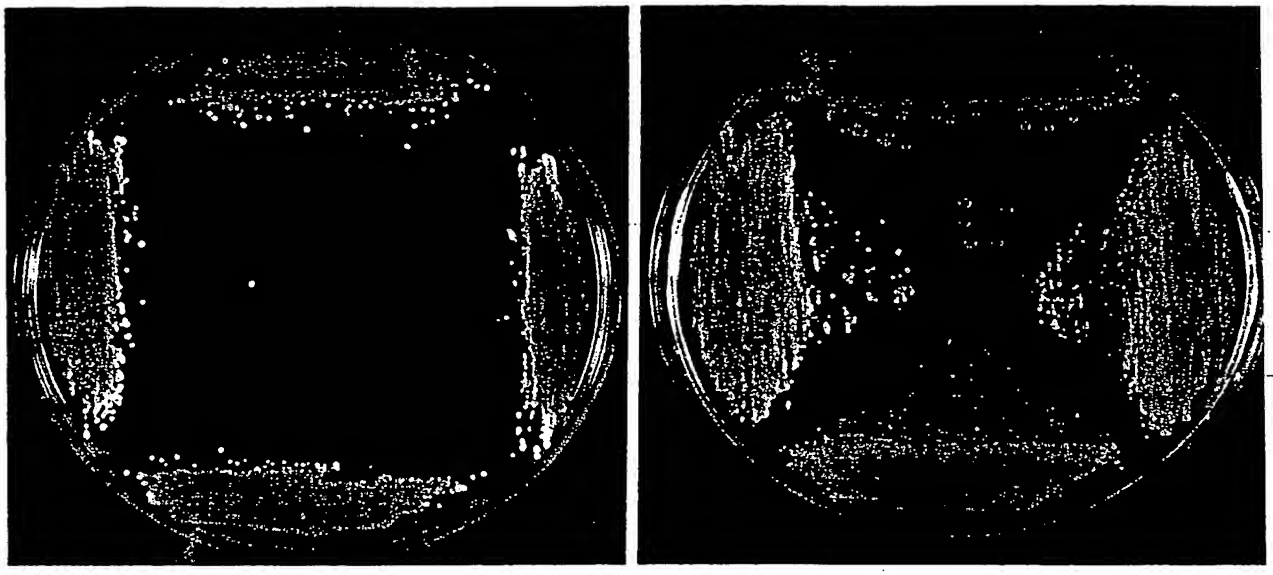
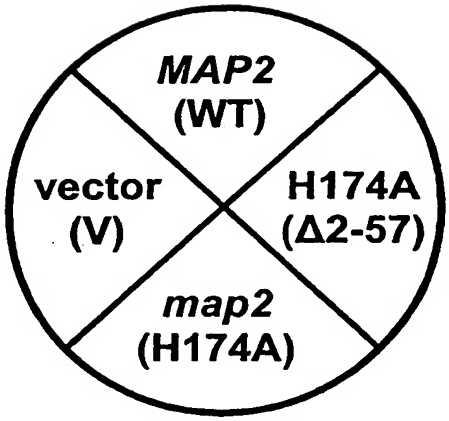

7.5
5.0
2.5
0.0
ABS600
Vector
MAP2 wt
H174A
Δ2-57 H174A
0
5
10
15
20
Hour

Figure 4

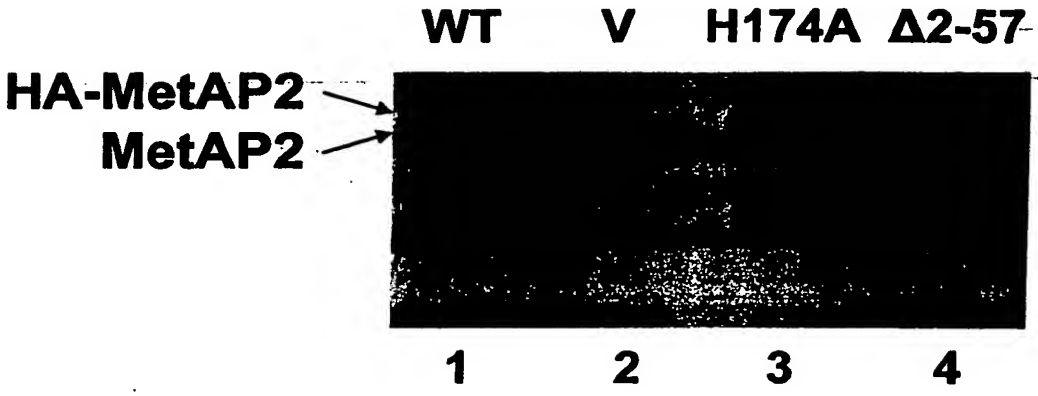


A. Glucose B. Galactose



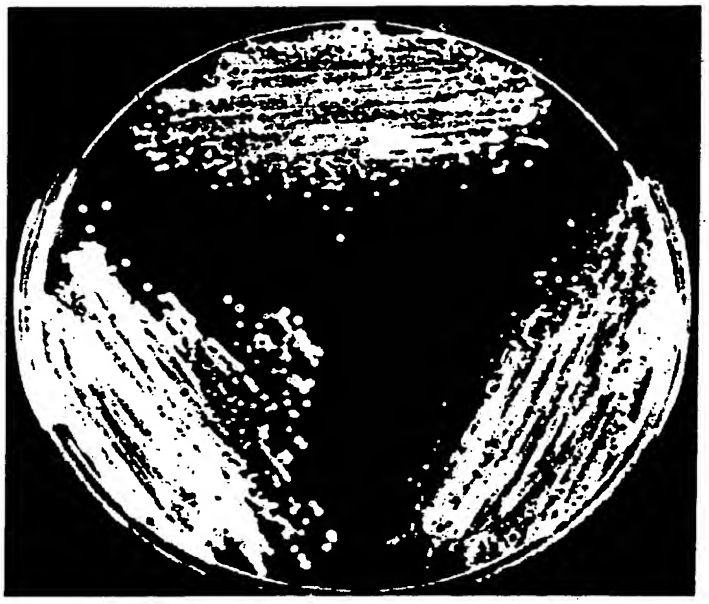
H174A-MetAP2 requires N-terminal residues 2-57 for inhibition of map1Δ growth under the GAL1 promoter.

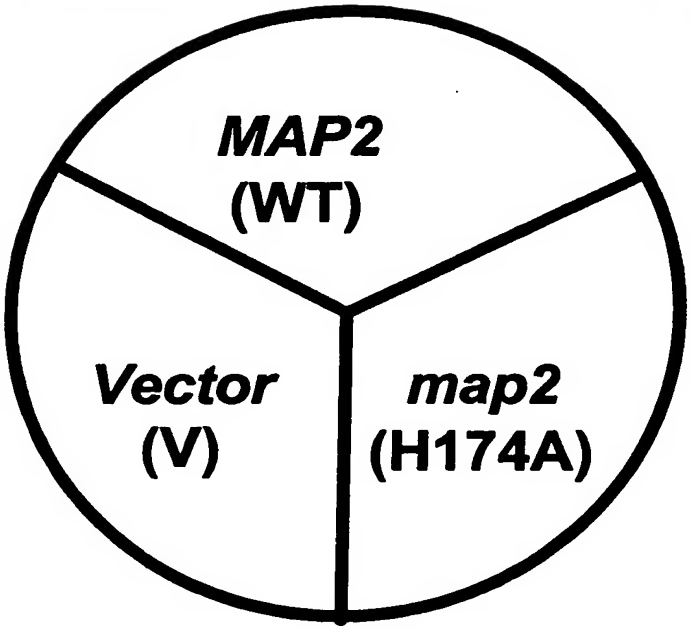
Figure 5



The steady levels of each MetAP2 construct are comparable. Immunoblot comparison of HA-MetAP2 wt, HA-MetAP2 H174A, and MetAP2 Δ2-57 H174A steady state levels in map1Δ.

Figure 6





Overexpression of H174A-MetAP2 under the GPD promoter does not inhibit the growth of map2Δ

Figure 7

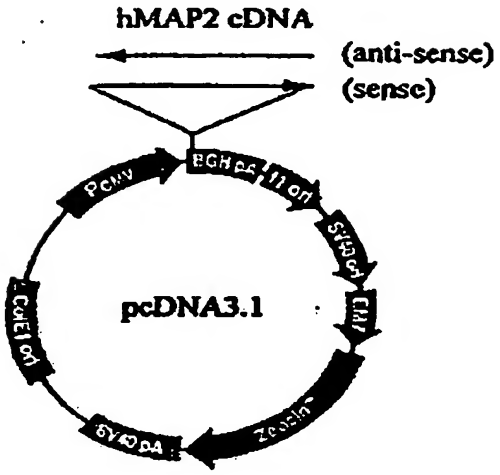


Figure 8

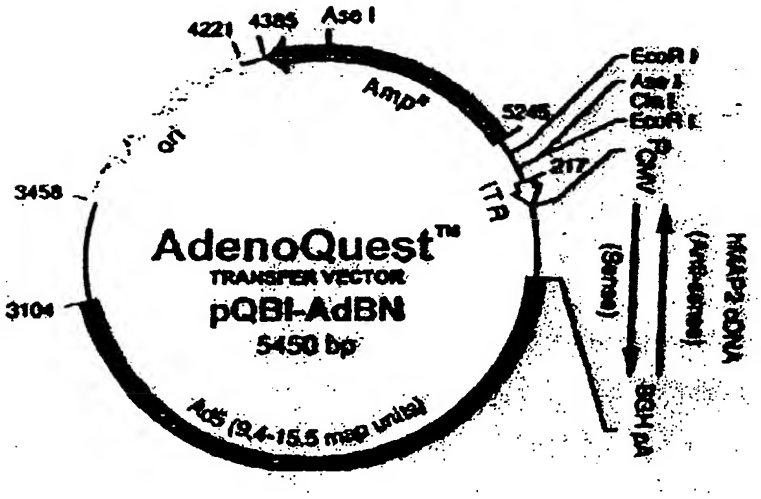


Figure 9

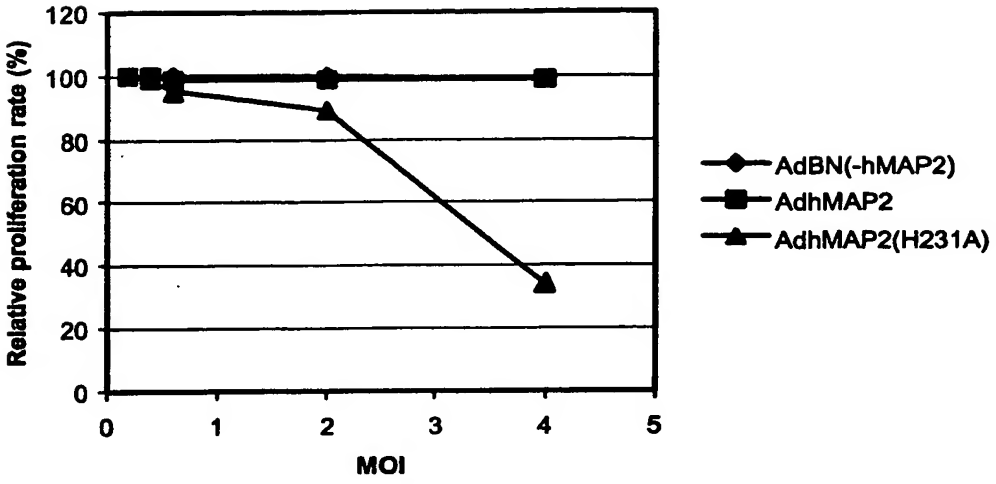
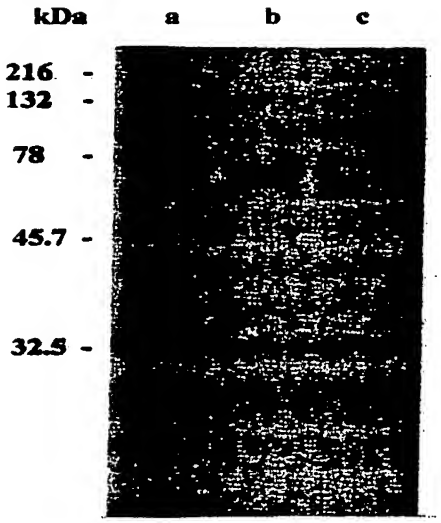

120
100
80
60
40
20
0
Relative proliferation rate (%)
0
1
2
3
4
5
MOI
AdBN(-hMAP2)
AdhMAP2
AdhMAP2(H231A)

Figure 10

A



B

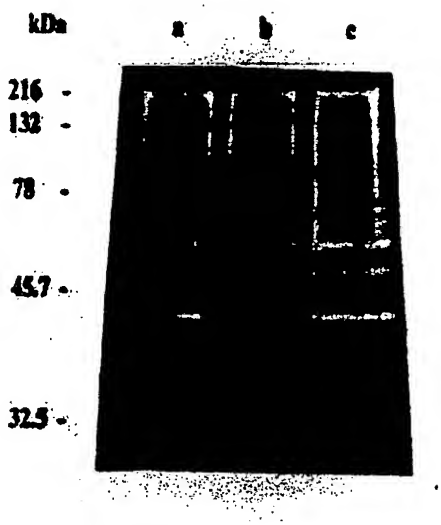


Figure 11